

DIY EMERGENCY HANDWASHING STATION



#MUTUALAID

compiled by Indigenous Action
www.indigenoussaction.org

We offer this 'zine in the midst of the COVID-19 pandemic in the Spring of 2020. Our unsheltered relatives cannot simply "stay home if they are sick" and "constantly wash their hands" as instructed by callous politicians who, predictably, had no plans to ensure the wellbeing of our relatives.

We've assembled this DIY emergency hand washing station as a way to support our relatives on the streets. Please replicate and improve these plans and ask unsheltered folx where they would be most useful to them. Let's take care of each other. Capitalism is pandemic. Colonialism is a plague.

If you purchase all the materials they cost about \$25-30 each to make (not including some extras like duct tape etc).

These can be made in about 20-45 minutes each (much less time if you are working on multiple at once.)

Most supplies listed can be donated, scavenged, or liberated.

SUPPLIES:

5-gallon buckets (x2)

Bucket lids (x2)

Fluid siphon

Rubber bulb kind, test getting buying bulk.

Small oval tub/bowl

For wash basin, oval shape leaves room for soap dispenser.

Foam mat

Has to be thick enough to make sure pressure from pumping won't smash the bulb over time.

Curtain rod

With L bent shape, metal cheap kind, they come in packs of two.

1/2" tubing (approximately 2 feet)

Tubing size depends on the connection to your Fluid siphon.

8" Zip ties (atleast 10)

OPTIONAL:

1" Diameter PVC pipe (4-5 inches length)

This is just to hold the tubing assembly in place and make it easier to remove.

1/2" plastic tubing coupler (x2)

To connect tubing if the Fluid siphon tubing is too short.

EXTRAS:

Duct Tape

Sharpie

Packing Tape (to laminate signs)

Printer & paper

TOOLS:

Drill with 1/2" bit and 3/16" bit

*Though in a pinch all holes can be made with a knife.

Sharp knife

Scissors or wire cutters to cut zip ties

Hand saw (optional, for cutting PVC)

1. PREPARING THE CLEAN WATER (BOTTOM) BUCKET:

Use the sharpie to mark a spot about an inch from the rim of the bucket. Drill a hole with the 1/2" bit. This will be for the siphon intake so make sure it fits. If it is too snug widen the hole. You can wrap duct tape on the siphon intake tube if it is too loose.

Put one of the lids tightly on the bucket and set aside.



2. MAKING THE PUMP:

Using the sharpie trace two large foot prints on the Foam Mat. Cut them out with a sharp knife.

Place the two foot cutouts on top of each other and make two incisions near the heel and two more right above those going along where the arch would be. The cuts need to be just big enough for zip ties to fit through.

Push the blade all the way through so that each slit is lined up on both foot cutouts.

Put zip ties through the slits and secure.

Cut the excess plastic from the zip ties (do so with every zip tie you secure from now on)



Now open the front of the two sandwiched foot cutouts and place the Fluid siphon so that the tubes extrude from the sides. With the sharpie, mark right above and below where the tubes connect to the bulb pump. Remove the Fluid siphon and make incisions. Replace the Fluid siphon between the foot cutouts and secure with zip ties.



Greywater maintenance:

Please check TOP BUCKET greywater often. If near full remove hose assembly & discard greywater in a gutter or water a tree if using bio-degradable soap. Clean with bleach & water (1 to 9 ratio) after heavy use.

If water is empty:

Remove top bucket.
Remove lid from bottom bucket & fill.

If soap is empty:

Unscrew soap dispenser top & pour in liquid soap refill, preferably bio-degradable.

**GREY
WATER**

**CLEAN
WATER**



#MUTUAL.AID

TAKE CARE OF EACH OTHER

LOCAL MUTUAL AID GROUP:

! DO NOT DRINK, NON-POTABLE

WASH YOUR HANDS!

1. Pump

May take
several pumps
to get flowing.

2. Soap

May take
several pumps
to get flowing.

3. Wash

Wash hands
thoroughly for
20 seconds.

4. Air Dry

3. MAKING THE WASH BASIN & GREY WATER (TOP) BUCKET:

The small oval tub/bowl will be our wash basin. Use the sharpie to mark two spots an inch apart on the left side of the wash basin, do the same thing on the right side. In the middle of the wash basin mark three spots in less than 1/2" apart for drainage holes. Drill holes on your marks, some plastic bins may crack so go slow!

Place the wash basin on top of a bucket lid and use the drilled holes to mark drill points with the sharpie.

Remove the wash basin and drill the marked holes through the lid.

Line up the holes you made on the wash basin and the lid then secure the left and right holes together with zip ties. Don't worry about leaks coming through these holes, if they drain too much patch them with duct tape. Secure the lid to the bucket.

Place the top bucket on top of the bottom bucket.



4. TUBE/SPOUT & PUMP ASSEMBLY

Take one of the curtain rods out of the package and place it so that "L" bend of the rod is above the wash basin (about 4-6 inches). You can either duct tape the curtain rod to the top bucket or you can use the 1/2" PVC pipe section as a guide. If so, duct tape the PVC pipe in the middle of the top bucket and slide the curtain rod through it.



Connect the Fluid siphon intake tube to the bottom bucket (through the 1/2" hole). Make sure that the tube is long enough to go to the bottom and not get kinked, if not, connect the additional 1/2" tubing (you can just duct tape it or use a coupler.)

Bring the other section of tubing up through the PVC (if used) and make sure it is long enough to extend over the curtain rod.



Now secure the tubing to the curtain rod with zip ties (making sure not to pinch the tubing too much). Carefully bend the curtain rod down slightly to ensure the water pours into the center of the wash basin.

5. FINAL ASSEMBLY

Grab the soap dispenser and place it near the front of the hand washing station (just pick a side to be the front, we put our foot pump on the right so we figured that was the front).

Make two marks on each side of the soap dispenser about 1/2" down from the top of lip of the wash basin. Remove the soap and drill holes on the marks. Secure the soap dispenser to the wash basin with a zip tie (make sure the zip tie is below the pump so you can screw off the top to refill).



Take off the top bucket and remove the foot pump tube from the bottom bucket.

Fill up the bottom bucket until water is just below the foot pump tube. Reassemble the wash station and test. It takes several pumps get water flowing.

You may have to make adjustments to tubing so that it is out of the way and people dont step on it while pumping. This can also be duct taped.

Print out our hand washing station use template from www.indigenousaction.org, make your own, or simply write on the buckets with sharpie to let folx know how to use and maintain them.

NOTES:

Make sure to write on the bucket "Not for Drinking - Non-potable Water."

The top bucket will need to be cleaned after heavy use. Prepare a bleach & water solution (1 part bleach to 9 parts water). Use rubber gloves. Remove the lid, rinse and then scrub with bleach solution. Replace the lid.

If no water is coming out of the spout, check the pressure from the Fluid siphon, some cheap siphons take a lot of pumping. We initially had some faulty siphons and had to replace them.

Insulate these in cold weather with blankets, a couple hoodies, or we figure those reflective insulated foils they make for vehicle windshields would work well and can be easily found at thrift stores.

You may want to consider securing the washing station to a tree or post to ensure it doesn't get easily knocked or blown over. This could be done with tie downs, wire, rope, more duct tape, etc! Just make sure it's not too much trouble to maintain.

You may want to schedule checking on the buckets to ensure the clean water is full and the grey water is being emptied. In high use areas this may need to occur multiple times a day or multiple hand washing stations may need to be placed in those areas.

In our area we figure we will check each station once a day.

You could put your contact on them or simply ask unsheltered folks and neighbors to help maintain them.

We're considering drilling a hole in the middle of the grey water top bucket and connecting about 3-4 feet of tubing so the grey water can drain off and they don't overflow.

We're also considering placing a hose intake on the bottom clean water bucket so a garden hose can be connected for easier refilling.

If you come up with other mods and ideas email us at:
indigenoussaction@gmail.com.



#UNSHELTEREDREFUGEES